Fact Sheet

NPDES Permit Number: AKG-37-1000
Date: October 25, 2010
Public Notice Expiration Date: Decermber 9, 2010
Contact: Cindi Godsey
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The U.S. Environmental Protection Agency (EPA) Plans To Issue A General Wastewater Discharge Permit To:

Alaskan Medium-Size Suction Dredge Placer Miners

and

the STATE of ALASKA
plans to issue a
Clean Water Act (CWA) § 401 CERTIFICATION

and
provide information on the
ALASKA COASTAL MANAGEMENT PROGRAM

EPA Proposes NPDES Permit Issuance.

EPA proposes to re-issue a National Pollutant Discharge Elimination System (NPDES) General Permit (GP) to Alaskan Suction Dredge Miners for gold placer mining operations in Alaska. The draft GP sets conditions on the discharge - or release - of pollutants from operations into waters of the United States.

On October 31, 2008, EPA approved the application submitted by the state of Alaska to administer the NPDES Program. Under the State program, ADEC will be phasing the assumption with different categories of discharges being phased in over a 3 year period. Under this phased approach, mining permits will transfer in year 2 or the end of October 2010. According to the Memorandum of Agreement between EPA and ADEC, EPA will complete work on any project where substantial work has been started but the State would issue any final permit. Because of the timing of the public notice of this permit, it will be issued as an APDES permit and as such, may be presented in a different format than that noticed by EPA although all required elements will be present.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures
- a description of the industry
- a description of proposed effluent limitations, monitoring requirements, and other conditions

The State of Alaska CWA § 401 Certification.

EPA has requested that the Alaska Department of Environmental Conservation (ADEC) certify the NPDES permit for this operation under section 401 of the Clean Water Act (CWA). A draft CWA §401 Certification is included in this Fact Sheet as Appendix A.

Consistency Determination

This GP was previously found consistent on June 23, 2000. On March 2, 2005, the Department of Natural Resources/Office of Project Management and Permitting (DNR/OPMP) sent a letter stating that with the minor proposed changes to the GP, a new ACMP review was not required. EPA plans to submit the draft GP to the DNR/Division of Coastal and Ocean Management (DCOM) when it is released for public notice.

EPA invites comments on the draft GP.

EPA will consider all substantive comments before issuing a final GP. Those wishing to comment on the draft GP or request a public hearing may do so in writing by the public notice expiration date. Please submit comments to USEPA-Region 10, 1200 Sixth Avenue Suite 900, OWW-130, Seattle, Washington 98101. Comments may be submitted by e-mail to godsey.cindi@epa.gov or faxed to (206) 553-0165. All comments should include name, address, phone number, a concise statement of basis for the comment and relevant facts upon which it is based. A request for public hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number.

Persons wishing to comment on the CWA § 401 Certification should submit written comments by the public notice expiration date to Tim Pilon at the Alaska Department of Environmental Conservation, 610 University Avenue, Fairbanks, Alaska 99709. Mr. Pilon may be reached by phone at (907) 451-2136 or by e-mail at Tim.Pilon@alaska.gov.

For information on the ACMP review process, please contact Ms Carrie Bohan at DNR/DCOM, P.O. Box 111030, Juneau, AK 99811-1030, Mail Stop: 1030, carrie.bohan@alaska.gov, or at (907) 465-8794. Please see Part VIII.E. of this Fact Sheet for further information.

A GP follows rulemaking procedures so EPA's issuance and promulgation activities must be conducted in accordance with the Administrative Procedure Act (APA). This GP will become effective 30 days after publication of the final GP in the Federal Register according to Section 553(d) of the APA. Anyone wishing to appeal this GP must do so in court according to 40 CFR §124.19. Interested persons may challenge the modifications, within 120 days of issuance, in the Circuit Court of Appeals of the

United States under CWA § 509(b)(1).

Documents are available for review.

The draft NPDES GP and fact sheet can be reviewed at EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday. This material is also available for inspection and copying at the following places in Alaska:

USEPA Alaska Operations Office
Federal Building, Room 537
222 West 7th Avenue
Anchorage, Alaska 99513-7588
Telephone: (800) 781-0983 (Within Alaska)

USEPA Alaska Operations Office
709 W. 9th Street, Room 223
Juneau, Alaska 99801
Telephone: (907) 586-7619

ADEC
Water Division
610 University Avenue
Fairbanks, AK 99709
Telephone: (907) 451-2142

The Administrative Record for this GP primarily consists of the draft GP, Fact Sheet and the documents referenced in this Fact Sheet. These are available upon request by contacting Cindi Godsey at (907) 271-6561 or godsey.cindi@epa.gov, or at the above Anchorage address.

Copies of the draft GP and fact sheet can be found on the EPA, Region 10 website at http://www.epa.gov/r10earth/waterpermits.htm (click on draft permits, then Alaska).

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LIST OF ACRONYMS

AAC	Alaska Administrative Code
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
AR	Annual Report
AWQS	Alaska Water Quality Standard
BMP	Best Management Practices
CFR	Code of Federal Regulations
CSU	Conservation System Unit
CWA	Clean Water Act
DCOM	Division of Coastal and Ocean Management
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
SPCC	Spill Prevention Control and Countermeasure
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey

I. GENERAL PERMITS

A. Permit Coverage

CWA § 301(a) provides that the discharge of pollutants is unlawful except in accordance with a National Pollutant Discharge Elimination System (NPDES) permit. Although such permits are usually issued to individual dischargers, EPA's regulations also authorize the issuance of "GPs" to categories of discharges [40 § 122.28] when a number of point sources are:

1. Located within the same geographic area and warrant similar pollution control measures;

2. Involve the same or substantially similar types of operations;

3. Discharge the same types of wastes;

4. Require the same effluent limitations or operating conditions;

5. Require the same or similar monitoring requirements; and

6. In the opinion of the Director, are more appropriately controlled under a GP than under individual permits.

Like individual permits, a violation of a condition contained in a GP constitutes a violation of the Act and subjects the owner or operator of the permitted facility to the penalties specified in CWA § 309.

A Notice of Intent (NOI) to be covered under this GP is required [40 CFR § 122.28(b)(2)(i)]. The requirements are outlined in Permit Part I.F. and an NOI is included as Appendix A of the GP. If this GP is reissued as ADEC gains the authority to administer the Mining Sector permits, EPA proposes to remove the requirement to send an NOI to EPA.

This GP will expire five (5) years from the date of effective date. 40 CFR § 122.28(b)(1) allows a GP to be administered according to the individual permit regulations found in 40 CFR § 124 so the GP will continue in force and effect until a new GP is issued. Only those facilities authorized to discharge under the expiring GP that submit an NOI 90 days prior to the expiration of this GP are covered by the continued GP.

EPA is proposing that all facilities covered by the 2005 GP are authorized under this GP if all NOI procedures are followed.

B. Limitations on Coverage

1. Many streams and stream reaches in Alaska have been designated as part of the federal wild and scenic rivers system or as a Conservation System Unit (CSU). Because this GP does not relieve a permittee of the requirements of other applicable federal, state or local laws, permittees should contact the district offices of the agencies that administer these

systems for additional restrictions that may apply to operations on claims within these designated areas.

2. Many streams in Alaska where suction dredging occurs have been designated by the Alaska Department of Fish & Game (ADF&G) as needing a permit with additional restrictions. Because this GP does not relieve a permittee of the requirements of other applicable federal, state or local laws, the draft GP requires permittees to contact ADF&G Habitat Division.

C. Prohibitions

1. This GP does not apply to facilities that are proposed to be located in National Parks System Units (i.e., Parks and Preserves), National Monuments, National Sanctuaries, National Wildlife Refuges, National Conservation Areas, National Wilderness Areas, National Critical Habitat Areas, within one nautical mile of a Steller sea lion rookery or haulout area, or in waters adjacent to the boundaries of areas designated as wild under the Wild & Scenic Rivers Act.

2. This GP does not apply to wetlands designated in the 1995 Anchorage Wetlands Management Plan.

D. Individual Permits

Owners or operators covered by a GP may be exempted from coverage by applying to the Director of the NPDES program for an individual permit. This request must be made by submitting an NPDES permit application, together with supporting documentation within 90 days of publication by EPA of a final GP in the Federal Register, or 180 days prior to the commencement of operation of a new source or new discharger.

The Director may require any person authorized by a GP to apply for and obtain an individual permit, or any interested person may petition the Director to take this action. The Director may consider the issuance of an individual permit when:

1. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;

2. The discharger is not in compliance with the terms and conditions of the GP;

3. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

4. Effluent limitation guidelines are subsequently promulgated for the point sources covered by the GP;

5. A Water Quality Management Plan containing requirements applicable to such point sources is approved; or

6. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the GP, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary

II. BACKGROUND ON SUCTION DREDGE PERMITTING

On June 30, 1992, EPA received a notice of citizen suit, alleging that EPA failed to perform a non-discretionary duty to regulate suction dredge gold placer mining operations in Alaska. At that time, EPA decided it would issue individual permits for mechanical placer mining operations (for the 1993 mining season) and propose a GP for suction dredge operations. On January 14, 1994, EPA proposed a GP that extended coverage to mechanical as well as suction dredge operations. 59 FR 2504 (Jan. 14, 1994). After responding to public comment, EPA issued the final GP on May 13, 1994. 59 FR 28079 (May 31, 1994). On September 28, 1994, two environmental groups filed a petition for review of the GP in the Ninth Circuit Court of Appeals.

On November 18, 1996, EPA and the two environmental groups entered into a settlement agreement to resolve the challenge to the GP. Pursuant to the agreement, EPA agreed to issue three separate GPs to modify and supersede the original GP challenged by the environmental groups in 1994. The settlement agreement also required EPA to complete two studies related to the impact of placer mining on the natural environment in Alaska. One study was to address the discharge of metals by placer mining operations and the other was to address the impact of suction dredge mining.

EPA issued two modified GPs on December 6, 1996, one for mechanical operations and one for medium-size suction dredge operations, plus a new GP for small suction dredges [61 FR 64796, December 6, 1996]. On April 4, 1997, three environmental groups challenged these permits. No. 97-70365 (9th Cir). In a separate action, the Alaska Miners Association (AMA) also challenged the GPs. No. 97-70379 (9th Cir.). These cases were consolidated on May 5, 1997. The challenge by the AMA was dismissed on January 21, 1999.

During the summers of 1997 and 1998 EPA staff and EPA contractors collected data at 31 placer mine sites and several suction dredge sites. These data were analyzed and presented in two final reports, one entitled “Alaska Placer Mining Metals Study” and the other entitled “Impact of suction dredging on water quality, benthic habitat, and biota in the Fortymile River, Resurrection Creek, and Chatanika River, Alaska.” The environmental groups believed that the suction dredge report did not address all of the required elements as set out in the 1996 settlement agreement.

To avoid further litigation over the GPs, EPA and the environmental groups entered into another settlement agreement. Pursuant to the agreement, EPA agreed that further study was necessary to quantify the full impact of suction dredge mining on the natural environment and that further research should be conducted before conclusions are reached about the impact of suction dredge mining on Alaska streams. EPA further agreed that by January 7, 2000, it would transmit to the

Federal Register any necessary revisions to the modified GPs to address the results of the metals study. As a result, the environmental groups' petition to review the three GPs was dismissed on August 31, 1999.

EPA transmitted the 2000 proposed GP to the Federal Register (FR) on January 7, 2000. The proposed GP was published in the FR on January 14, 2000. The final GP was published on August 31, 2000. The GP was effective on October 3, 2000.

The propose 2005 GP was published in the FR on April 24, 2005, for a 45 day comment period. The final GP was published on September 7, 2005. The permit was effective on October 7, 2005.

As of April 2010, 91 operations have active coverage under the GP. Re-notice, according to the 2005 GP, should occur by July 9, 2010 (90 days prior to the expiration date).

III. INDUSTRY DESCRIPTION

Placer mining involves the mining and extraction of gold or other heavy metals and minerals primarily from alluvial deposits. These deposits may be in existing stream beds or ancient, often buried, stream deposits, i.e. paleo or fossil placers. Many Alaskan placer deposits consist of unconsolidated clay, sand, gravel, cobble and boulders that contain very small amounts of native gold or other precious metals. Most are stream deposits that occur along present stream valleys or on benches or terraces above existing streams. Beach placer deposits have been and continue to be important producers in Alaska. These deposits, most notable near Nome, include both submerged and elevated beach placer deposits.

Dredging systems are classified as hydraulic or mechanical (including bucket dredging), depending on the methods of digging. Suction dredges, the most common hydraulic dredging system, are quite popular in Alaska with the small and recreational gold placer miner. Like all floating dredges, suction dredges consist of a supporting hull with a mining control system, excavating and lifting mechanism, gold recovery circuits, and waste disposal system. All floating dredges are designed to work as a unit to dig, classify, beneficiate ores and dispose of waste. Because suction dredges work the stream bed rather than stream banks, the discharge from suction dredges consists totally of stream water and bed material.

In the modified 1994 permit, EPA defined a medium-size suction dredges as those with nozzles greater than four and less than or equal to eight inches. In the 2000 re-issuance of this GP, EPA redefined the medium-size suction dredge range as greater than four inches and less than or equal to ten inch dredges. When EPA re-issued the small suction dredge GP in 2002, it changed the size requirements from four inches and under to six inches and under. Because a change was made to the small suction dredge GP in 2002, the medium-size suction dredge GP reissued in 2005 covers facilities over six inches up to and including ten inch dredges. The draft permit intends to keep the same size limits as the 2005 GP.

IV. RECEIVING WATER

The receiving waters are the waters of United States and the State of Alaska, most of which are classified in the Alaska Water Quality Standards (AWQS) [18 AAC 70] as Classes (1)(A), (B), (C), and (D) for use in drinking, culinary and food processing, agriculture, aquaculture, and industrial water supply; contact and secondary recreation; and growth and propagation of fish, shellfish, other aquatic life, and wildlife. Some of the receiving waters have been reclassified as industrial use only. These are Isabell Creek (upper), Lillian Creek, Lucille Creek, Olive Creek (upper), and Ruth Creek near Livengood and Nolan Creek and all its tributaries excluding Acme Creek near Wiseman.

This permit will be available for dischargers in reclassified waters. The AWQS contained in this permit are more stringent than would be applied in an individual permit in these locations. A facility located on any of the above receiving waters may apply for an individual permit under FS I.D.1.

Some of the receiving waters are marine waters that are classified in 18 AAC 70 as Classes (2)(A), (B), (C), and (D) for use in aquaculture, seafood processing, and industrial water supply; contact and secondary recreation; growth and propagation of fish, shellfish, other aquatic life, and wildlife; and harvesting for consumption of raw mollusks or other raw aquatic life.

V. EFFLUENT LIMITATIONS, MONITORING & REPORTING REQUIREMENTS

In establishing permit limits, EPA first determines which technology-based limits must be incorporated into the permit. EPA then evaluates the effluent quality expected to result from these controls, to see if it could result in any exceedences of the AWQS in the receiving water. If exceedences could occur, EPA must include water quality-based limits in the permit. The draft permit limits will reflect whichever requirements (technology-based or water quality-based) are more stringent.

A. Technology-based Effluent Limitations

Pursuant to CWA § 402(a)(2) and 40 CFR § 122.44(k)(2), Best Management Practices (BMPs) are proposed in the GP.

Suction dredging's unique method of intake and displacement present unusual permitting issues. As discussed above, a suction dredge is a mechanical device that floats on the stream surface and pumps stream water and stream bed material through a suction intake conduit to a sluice box from which gold or other minerals may be recovered. The discharge from suction dredges consists totally of stream water and bed material immediately released back into the receiving water.

The BMPs in Permit Part II.C. are being proposed because technology-based numeric effluent limitations are infeasible.

B. Water quality-based Effluent Limitations

CWA § 301(b)(1) requires the establishment of limitations in permits necessary to meet water quality standards by July 1, 1977. All discharges to state waters must comply with state and local coastal management plans as well as with AWQS, including the state's antidegradation policy. Discharges to state waters must also comply with limitations imposed by the state as part of its coastal management program consistency determination and of its certification of NPDES permits under CWA § 401.

The NPDES regulations at 40 CFR § 122.44(d)(1) require that permits include water quality-based limits that "Achieve water quality standards established under CWA § 303, including State narrative criteria for water quality."

EPA has determined that turbidity is a pollutant of concern. Required turbidity monitoring is designed to ensure that the BMPs are implemented properly.

1. *Freshwaters:*

   The draft GP requires a daily visual inspection for turbidity of the area within 500 feet downstream of the suction dredge during operation. This also includes any turbidity that may result from any other part of the operation. If turbidity is observed beyond 500 feet, the draft GP requires the permittee to modify the operation to meet the permit limitation. If the operation cannot be modified to meet the limit, the discharge is not authorized. In most cases, water quality recovers rapidly. The daily inspection during operation, combined with the BMPs in Permit Part II.C. will assure that the AWQS are met.

2. *Marine Waters*

   The draft GP requires a daily visual inspection for turbidity of the area within a 500 foot radius of the suction dredge during operation. This also includes any turbidity that may result from any other part of the operation. If turbidity is observed beyond 500 feet, the draft GP requires the permittee to modify the operation to meet the permit limitation. If the operation cannot be modified to meet the limit, the discharge is not authorized. In most cases, water quality recovers rapidly. The daily inspection during operation, combined with the BMPs in Permit Part II.C. will assure that the AWQS are met.

3. *Mixing Zones*

   EPA expects that ADEC will provide a CWA § 401 Certification including the 500 foot mixing zones proposed in this GP and that they are protective of AWQS. If the final CWA § 401 Certification authorizes a different size mixing zone, the limits in the GP will be changed as necessary to ensure that AWQS are met at the edge of the mixing zone. If the CWA § 401 Certification does not authorize mixing zones for turbidity, the permit will be changed to require meeting the AWQS for turbidity at the point of discharge.

C. Monitoring

CWA § 308 and the federal regulations at 40 CFR § 122.44(i) require that permits include monitoring to determine compliance with effluent limitations. Monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality. The permittee is responsible for conducting the monitoring and for reporting results to EPA.

D. Reporting

The draft GP requires permittees to submit an annual report by January 31st of each year for activities during the previous calendar year, based on the reporting provisions in 40 CFR § 122.48. 40 CFR § 122.44(i)(2) allows flexibility in determining the frequency of reporting.

E. Additional Permit Provisions

Sections III, IV, and V of the draft GP contain standard regulatory language that must be included in all NPDES permits. Because they are regulations, they cannot be challenged in the context of an NPDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

The standard regulatory language of a permit that ADEC will issue is different than that issued by EPA. Appendix D contains the standard language from the Alaska Pollutant Discharge Elimination System (APDES) Program.

VI. BEST MANAGEMENT PRACTICES (BMPs)

BMPs are measures that are intended to prevent or minimize the generation and the potential for the release of pollutants from industrial facilities to the waters of the United States through normal operations and ancillary activities.

Pursuant to CWA § 402(a)(1), development and implementation of BMP Plans may be included as a condition in NPDES permits. CWA § 402(a)(1) authorizes EPA to include miscellaneous requirements that are deemed necessary to carry out the provision of the Act in permits on a case-by-case basis . BMPs are required to control or abate the discharge of pollutants in accordance with 40 CFR § 122.44(k).

The draft GP requires compliance with the following BMPs:

A. Dredging that results in undercutting, littoral channeling, or otherwise results in stream bank or beach erosion, is prohibited.

This practice will ensure that erosion does not occur and that the finer sediments that may be found in these areas do not cause turbidity problems in the receiving waters.

B. Dredging and discharging are prohibited within 500 feet of locations where

anadromous fish are spawning or where anadromous fish eggs or alevins are known to exist at the time dredging occurs. Each Permittee shall consult the regional office of the ADF&G for the region in which the Permittee proposes to operate a dredge in order to obtain the information necessary to comply with this BMP. Each Permittee shall report the information obtained from ADF&G, and the name and title of the official contacted, to EPA concurrently with the NOI.

This BMP is designed to minimize impacts to fish spawning and spawning habitat and to provide for fish passage.

C. Motorized winches or other motorized equipment shall not be used to move boulders, logs, or other natural obstructions.

This practice should ensure that important habitat which includes large organic debris and large boulders in these areas will not be destroyed.

D. If an ADF&G Fish Habitat Permit (Title 16 Permit) is necessary, no wheeled or tracked equipment may be used instream while dredging is in progress unless it is allowed by a Title 16 permit.

This practice should ensure that important habitat in these areas will not be destroyed. Also, pollutant loading from any instream operation should be considered as part of the operation.

E. Suction dredges shall not operate within 800 feet of:

1. another dredging operation occurring simultaneously or,

2. a location where it is apparent that another operation has taken place.

This practice should ensure that the mixing zone of a facility does not overlap with that of another since 800 feet is the distance of a 500 foot mixing zone for each operation plus a designated 300 foot buffer before the next suction dredge would impact water quality.

F. Dredging of concentrated silt and clay should be avoided. The permittee shall use reasonable care to avoid dredging silt and clay materials that would result in a significant increase in turbidity. Reasonable care includes moving the dredge to a new location or reducing the volume of effluent discharge by limiting operation speed of the suction dredge.

This practice will decrease the amount of fine material that will be released into the water that could cause turbidity plumes in excess of the permitted distance.

G. Care shall be taken by the operator during refueling of equipment to prevent spillage into surface waters or to groundwater. **Any spills shall be cleaned up using materials such as sorbent pads and booms. All spills shall be reported to ADEC by calling 1-800-478-9300.**

This practice will decrease the potential for contamination of surface water by

*petroleum products. This **bolded portion** of this requirement is included based on a previous ADEC CWA § 401 Certification which stated: Under 18 AAC 75.300: a person must notify the [ADEC] by telephone immediately in the result of a release or discharge of a hazardous substance. EPA expects ADEC's CWA § 401 Certification to contain this requirement and retains this condition in the GP.*

VII. OTHER REQUIREMENTS

A. Oil Spill Requirements

CWA § 311 prohibits the discharge of oil and hazardous materials in harmful quantities. The operator shall maintain fuel handling and storage facilities in a manner that will prevent the discharge of fuel oil into the receiving waters. A Spill Prevention Control and Countermeasure Plan (SPCC Plan) shall be prepared and updated as necessary in accordance with provisions of 40 CFR Part 112 for facilities with the capacity to store 660 gallons in a single container above ground, 1320 gallons in the aggregate above ground, or 42,000 gallons below ground.

The Permittee shall indicate in the AR if an SPCC Plan is necessary and in place at the site and if changes were made to the Plan over the previous year.

B. Endangered Species Act

The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. EPA sent a letter to the USFWS and to NMFS on January 29, 2010, requesting a species list for the coverage area of the GP. If necessary, EPA will enter into informal or formal consultation with USFWS and NMFS to ensure that the GP will not result in unacceptable impacts to any of the species identified on these lists. Approximate areas of designated critical habitat are shown in GP Appendix B.

The previous GP contained a 1 nautical mile buffer around Steller sea lion rookeries and haulouts. That provision has also been included in this draft GP.

C. Essential Fish Habitat (EFH)

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act set forth a number of new mandates for NMFS, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish habitat. The action agency needs to make a determination on Federal actions that may adversely impact EFH.

In streams where suction dredging occurs, the most critical life stage for salmon is the egg stage. The GP prohibits suction dredging within 500 feet of locations where fish are spawning or where fish eggs or alevins are known to exist. The ADF&G issues permits for mining in anadromous streams that limit or prohibit mining while the eggs are in the gravel. In freshwaters, the GP is unlikely to be

used during the critical phase and if it were, the studies showed that the impacts of an operation are minimal after 500 feet; therefore the 500 foot buffer should provide sufficient protection. EPA has determined that no adverse impact to EFH in freshwaters would result from the reissuance of this permit.

Most marine waters surrounding the state of Alaska have been designated as essential fish habitat. In a GP, it is difficult to determine where facilities might be located during the life of the permit which makes it difficult determine the potential impact on EFH. In general, suction dredges of the size covered by this GP do not operate in waters greater than 30 feet in depth and the timing is restricted by weather and ice cover. Most facilities that operate in marine waters, operate off-shore of Nome in Norton Sound. Because of the restrictions on depth and timing, EPA has determined that no adverse impact to EFH would result from the reissuance of this permit. EPA believes that localized impacts to EFH species may occur in other areas of marine waters covered by the GP but that no overall adverse impact on an EFH species would occur.

This determination will be sent to NMFS with the draft GP and Fact Sheet. If there are any recommendations made, EPA will consider them prior to final issuance of the GP.

D. State Certification

CWA § 401 requires EPA to seek certification from the State that the permit is adequate to meet AWQS before issuing a final permit. The regulations allow for the State to stipulate more stringent conditions in the permit, if the certification cites the CWA or State law references upon which that condition is based. In addition, the regulations require a certification to include statements of the extent to which each condition of the permit can be made less stringent without violating the requirements of State law.

A draft CWA § 401 Certification is included in this Fact Sheet as Appendix A. The draft permit has been sent to the State to begin the final certification process. If the state authorizes different or additional conditions as part of the certification, the permit may be changed to reflect these conditions.

E. Consistency Determination

This GP was found consistent on June 23, 2000. On January 13, 2005, EPA requested information on the Alaska Coastal Management Program (ACMP) review. On March 2, 2005, the OPMP sent a response letter. In its response, the DNR/Office of Project Management and Permitting (now the Division of Coastal and Ocean Management – DCOM) stated that with the minor proposed changes to the GP, a new ACMP review is not required. EPA will transmit the draft GP and Fact Sheet requesting that the same finding be made on this GP.

F. Permit Expiration

This permit will expire five years from the effective date of the permit.

STATE OF ALASKA
DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
WASTEWATER DISCHARGE AUTHORIZATION PROGRAM

SEAN PARNELL, GOVERNOR
555 Cordova, 3rd Floor
Anchorage, Alaska 99501-2617
Phone: (907) 269-3059
Fax: (907) 334-2415
http://www.state.at.us/DEC

October 6, 2010

File: 900.68.002

Mr. Michael J. Lidgard
NPDES Unit Manager
USEPA
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

RE: 401 Certification of Draft NPDES General Permit AKG-37-1000, Medium-Size Suction Dredging

Dear Mr. Lidgard:

On March 18, 2010, U.S. Environmental Protection Agency (EPA), Region 10 requested Clean Water Act (CWA) Section 401 pre-certification for the reissuance of National Pollutant Discharge Elimination System (NPDES) General Permit AKG-37-1000 (GP), which regulates discharges from placer mining with a medium-size suction dredge in Alaska.

The enclosed Section 401 certification contains provisions authorizing the mixing zone contained in the GP. The enclosed 401 certification is authorized under CWA Section 401 and Alaska Administrative Code (AAC) 18 AAC 15 and 18 AAC 70.

This Alaska Department of Environmental Conservation (department) action considered reissuance of the GP with respect to the Alaska Coastal Management Program (ACMP) and reviewed the discharges regarding ACMP and 11 AAC 110. This general permit was previously found consistent on June 23, 2000. In a letter dated March 2, 2005, the ACMP decided that the reissuance of the GP does not require consistency review, because it proposes no relaxation to allowable effluent concentrations or volumes when compared to the previous, administratively extended, and ACMP-consistent GP; therefore, pursuant to 11 AAC 110.820(k)(4) and 11 AAC 110.830, consistency review is not required for reissuing this permit.

Department regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. Informal review requests must be delivered to the Director, Division of Water, 555 Cordova Street, Anchorage, AK 99501 within 15 days of the permit decision. Visit http://www.dec.state.ak.us/commish/ReviewGuidance.htm for information on Administrative Appeals of Department decisions. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Street, Suite 303, Juneau, AK 99811 within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have any questions regarding the Section 401certification, please contact Allan Nakanishi at 907-269-4028 or at allan.nakanishi@alaska.gov.

Sincerely,

Sharon Morgan, Manager
Wastewater Discharge Authorization Program

Enclosure: Certificate of Reasonable Assurance for Draft NPDES General Permit AKG-37-1000

cc: Cindi Godsey, EPA, Anchorage
Allan Nakanishi, ADEC, Anchorage
Tim Pilon, ADEC, Fairbanks
Carrie Bohan, DNR/DCOM/Anchorage
Jack Kerin, ADNR/DMLW, Fairbanks
Mac McLean, ADNR/OHMP, Fairbanks
Steve McGroarty, ADNR/DMLW, Fairbanks

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act (CWA), was requested by U.S. Environmental Protection Agency (EPA), Region 10, for National Pollutant Discharge Elimination System (NPDES) draft General Permit No. AKG-37-1000 (GP), ALASKAN MEDIUM-SIZE SUCTION DREDGE PLACER MINERS (nozzle size over 6 inches and up to 10 inches).

A Water Quality Certification is required for the proposed activities, because the activities will be authorized by EPA's GP, and a discharge may result from the proposed mining activities.

After reviewing the GP, Alaska Department of Environmental Conservation (department) certifies that there is reasonable assurance that the proposed activities, as well as any discharge that may result, are in compliance with the requirements of Section 401 of the CWA, which includes the Alaska Water Quality Standards (18 AAC 70), provided that the following stipulations are adhered to:

1. The department authorizes the language contained in sections II.A.1 and II.A.2 of the draft NPDES permit allowing permittees a 500 foot mixing zone for turbidity as providing reasonable assurance that water quality will be protected.

   Rationale: Turbidity has fresh and marine water quality criteria established under 18 AAC 70.020(b). Under State Regulations 18 AAC 70.240 to 18 AAC 70.270 (June 26, 2003), which are the most recent mixing zone regulations approved by EPA for issuance and certification of NPDES Permits, the department has authority to authorize mixing zones in a permit or certification. The authorized mixing zone will ensure that the water quality standards are met at all points outside of the mixing zone.

   EPA has permitted medium-size suction dredge activities with a statewide general permit since 1994. Two significant studies were conducted by EPA and its contractors in the summers of 1997 and 1998 evaluating the impacts of suction dredging on water quality (including metals), benthic habitat, and biota in Alaska streams. Results indicated that the primary effects of suction dredging on water chemistry were increased turbidity, total filterable solids, and copper and zinc concentrations only in a localized area downstream of the dredge, but these variables returned to upstream levels within 80 – 160 meters downstream of the dredge.

   A cooperative effort between the U.S. Geological Survey and Alaska Department of Natural Resources produced another study on the impacts of suction dredging on Alaska waters in 1997. The study concluded that 500 feet downstream of suction dredging had no measureable effect on water chemistry, and turbidity recovered to levels in compliance with water quality standards.

Subsequent annual reporting and inspections of suction dredge mining operations confirm that medium-size suction dredging, conducted in accordance with the permit conditions, has only localized impacts allowing for the temporary disturbance of sediments and increased turbidity during mining, but areas beyond the 500 foot mixing zone remain unaffected.

In authorizing this mixing zone, the department considered all aspects required in 18 AAC 70.015, Antidegradation, and 18 AAC 70.240 to 18 AAC 70.270, mixing zones, (June 26, 2003), including, but not limited to, the potential risk to human health and to ecological resources of receiving waters, and mixing zone modeling of the predicted effluent quality from the discharge.

The department finds that the 500 foot size of any site-specific mixing zone authorized for discharge following the procedures in this certification is appropriate and provides reasonable assurance that designated and existing uses of the receiving waters outside of the mixing zone are maintained and fully protected.

1. The following language shall be contained in section II.D of GP as Best Management Practice (BMP) #7.
   Care shall be taken by the operator during refueling of equipment to prevent spillage into surface waters or to groundwater. Any spills shall be cleaned up using materials such as sorbent pads and booms. All spills shall be reported to the department by calling 1-800-478-9300.

   Rationale: Under 18 AAC 75.300, a person must notify the department by telephone immediately after a release or discharge of a hazardous substance.

2. The antidegradation policy of the Alaska Water Quality Standards (18 AAC 70.015) states that the existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected. This analysis is attached as Appendix A to this certification.

Date

Sharon Morgan, Manager
Wastewater Discharge Authorization Program

APPENDIX A: ANTIDEGRADATION ANALYSIS

401 Certification of Draft NPDES General Permit No.AKG-37-1000,
Medium-Size Suction Dredging

The antidegradation policy of the Alaska Water Quality Standards (18 AAC 70.015) states that the existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected. This appendix analyzes and provides rationale for the department's decisions in the Section 401 Certification with respect to the antidegradation policy.

The department's approach to implementing the antidegradation policy found in 18 AAC 70.015 is based on the requirements in 18 AAC 70 and the *Interim Antidegradation Implementation Methods,* dated July 14, 2010. Using these requirements and policies, the department determines whether a water body or portion of a water body is classified as Tier 1, Tier 2, or Tier 3, where a larger number indicates a greater level of water quality protection. This analysis conservatively assumes that all operations under this draft general permit (GP) will be in Tier 2 waters, and this antidegradation analysis focuses on that level of protection.

At this time, the department has not designated any Tier 3 waters in Alaska. However, if an applicant applies for coverage under this GP in a federal or state park or in a wildlife refuge, department staff will decline GP coverage and require the applicant to submit an application for an individual permit.

The GP being certified provides each permittee a mixing zone for turbidity. An antidegradation analysis was applied on a parameter-by-parameter basis, and the department concluded authorizing turbidity mixing zones throughout the state should be subjected to an antidegradation analysis.

Under a Tier 2 analysis, waters discharged under this GP are subject to an antidegradation analysis, as detailed in the department's July 14, 2010, Policy and Procedure guidance for *Interim Antidegradation Implementation Methods*. The State of Alaska's antidegradation policy states the following:

> 18 AAC 70.015(a)(1) existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected; and
>
> 18 AAC 70.015(a)(2) if the quality of water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality must be maintained and protected unless the department, in its discretion, upon application, and after receiving from the applicant all information reasonably necessary for a decision on the application, allows the reduction of water quality for a short-term variance under 18 AAC 70.200, a zone of deposit under 18 AAC 70.210, a mixing zone under 18 AAC 70.240, or another purpose as authorized in a department permit, certification, or other approval. The department will authorize a reduction in water quality only after the applicant submits evidence in support of the application and the department finds that the five specific requirements of the antidegradation policy at 18 AAC 70.015(a)(2)(A)-(E) are satisfied. The department's findings follow:

(A) Allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located.

Rationale: As indicated in 2008 data for the minerals industry, the Alaska Office of Economic Development/Minerals provided that 282 equivalent jobs were created by the placer industry, and the placer mines produced approximately 56,759 ounces of gold worth approximately $49,491,578 in 2008. Ten commercial recreational gold prospecting sites exist in Alaska providing opportunities for tourists to experience mining for gold. It is estimated that aircraft access, camp services, and support for these businesses results in $250,000 to $500,000 in revenue per year. The placer industry also supports local economies by purchasing significant amounts of equipment, parts, fuel, food, freight, and other services.

According to a report by McDowell Group (2008) on the economic benefit of Alaska's mining industry, 175 families are engaged in placer mining with a total estimated production of 54,000 ounces of gold. Suction dredging using nozzles up to 6 inches in diameter are considered recreational dredges in Alaska. Some of the operators under the Medium-Size Suction Dredging GP are recreational and some are commercial. Both sectors contribute to local and family economies.

Continued or new placer mining in Alaska is tied to gold prices and expenses associated with operating. While gold prices are at historic highs, fuel prices are also high. Since many mines are remote and require transportation and stored fuel for operations, this is a significant economic factor, especially for non-commercial enterprises.

The department finds that operation and authorization of a 500 foot mixing zone for medium-size suction dredging under sections II.A.1 and II. A. of the GP accommodates important economic and social development and that this requirement is met.

(B) The reduced water quality will not violate applicable water quality criteria, except as allowed under 18 AAC 70.015(a).

Rationale: For the Medium-Size Suction Dredging Permit, a 500 foot mixing zone for turbidity ensures that applicable criteria are met outside the mixing zone. Moreover, suction dredging is a mobile operation, and impacts are localized and transient. See the June

1999 final report prepared for EPA titled "Impact of Suction Dredging on Water Quality, Benthic Habitat, and Biota in the Fortymile River, Resurrection Creek, and Chatanika River, Alaska", and "Studies of Suction Dredge Gold-Placer Mining Operation Along the Fortymile River, Eastern Alaska" by the U.S. Geological Survey, USGS Fact Sheet FS--154-97, October 1997. Monitoring in section II.B, best management practices (BMPs) in section II.C, annual reporting in section III.B, and inspections in section V.O of the GP will protect water quality under 18 AAC 70.240(b).

The department finds that this requirement is met.

(C) Resulting water quality will fully protect existing uses.

Rationale: Previous versions of this GP have authorized mixing zones for turbidity effluent limits since 1994. When compared to previous GPs, the GP does not propose any changes that would contribute to the discharge of lower quality wastewater.

The department finds that the resulting water quality will be adequate to fully protect existing and designated uses and that these requirements are met.

(D) The most effective and reasonable methods of pollution prevention control and treatment will be applied to all wastes and other substances to be discharged.

Rationale: The department finds the most effective methods of prevention, control, and treatment are the practices and requirements set out in this permit and currently in use at these facilities. Mine operators are required to implement the BMPs included in section II.C of the Medium-Size Suction Dredging Permit. Permittees were required in their previous permits, and are still required in the GP, to review their BMPs annually. These BMPs include pollution prevention measures and controls appropriate for each facility.

The department finds that this requirement to address pollution prevention, control, and treatment is met.

(E) Wastes and other substances discharged will be treated and controlled to achieve the highest statutory and regulatory requirements.

Rationale: Applicable "highest statutory and regulatory requirements" are defined in 18 AAC 70.990(30), as amended June

26, 2003. Accordingly, there are three parts to the definition. The first part of the definition includes all federal technology-based effluent limitation guidelines (ELGs), as found in 40 Code of Federal Regulations, Part 440, Subpart M. The GP implements the technology-based ELGs for the subcategory of gold placer mines. The second, part of the definition considers discharge of sewage to sewers and is not applicable to these permittees. The third part includes any more stringent treatment required by state law, including 18 AAC 70 and 18 AAC 72. The correct operation of equipment, visual monitoring, and following the BMPs, as wells as other GP requirements, will control the discharge and satisfy all applicable federal and state permit conditions and requirements. See the rationale detailed above in item B. This achieves the highest statutory and regulatory requirements.

The department finds that the treatment required in this GP achieves the highest statutory and regulatory requirements and that this requirement is met.

APPENDIX B -- SUMMARY OF SUCTION DREDGE STUDY

EPA commissioned a suction dredge study that was conducted on the Fortymile River in 1997 and 1998 by Idaho State University. Two sites were chosen, Site 1 was in the vicinity of a 10 inch suction dredge while Site 2 was in the vicinity of an 8 inch suction dredge. USGS also conducted studies in the same area.

The primary effect of dredging on water chemistry was increased turbidity, total filterable solids, and copper and zinc concentrations downstream of the dredge.

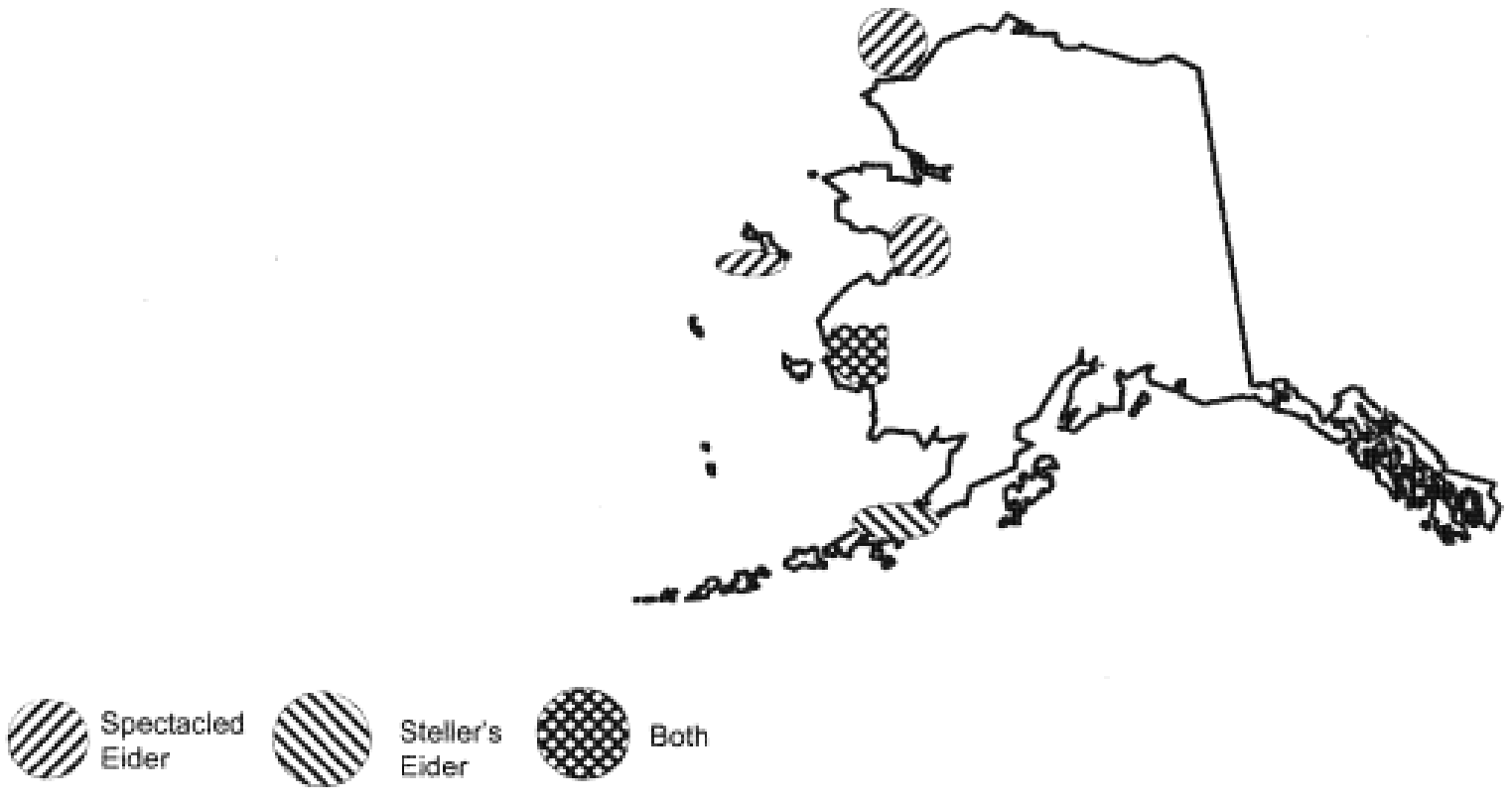
The turbidity plume was visually dramatic at Site 1 but spatially confined to less than 525 feet. At 100 feet downstream, the turbidity values were reported at 19 NTU which, with background levels reported at 2.2 - 2.3 NTU, would exceed the AWQS of 5 NTU above background. But at 200 feet below the dredge, the turbidity values were 3.7 NTU which is only 1.4 - 1.5 NTUs above background which is well within the AWQS and the permit limits. The USGS report states that the turbidity values for Site 2 were less than Site 1. In their study, USGS attributes higher turbidity for Site 1 to increased volume of the larger dredge and the finer material being mined. It should be noted that even with these adverse conditions, the ten inch dredge was well within compliance with the discharge requirements of their NPDES permit.

As the sediments were transported downstream, the total copper and zinc concentrations declined. By 262 feet downstream of the dredge, copper and zinc concentrations were similar to those measured upstream of the dredge.

In general, the observed decrease in water clarity was unlikely to have altered ecosystem function in the area of the Fortymile where the dredge was located. There also did not appear to be any downstream influence on bed morphology by dredged sediments, indicating that dredging strongly influenced immediately adjacent substrates but had little effect beyond the dredged area. Based on observations made in both studies it appears that the dredge piles at the examined locations will remain in place no longer that 1 to 3 years and in many cases the stream channel will return to its pre-dredge condition in a year.

As with water clarity, the effect of suction dredging on macroinvertebrate abundance and diversity was confined spatially to a relatively small area downstream of the dredge. Both abundance and diversity were notably reduced for 33 feet downstream of Site 1 with similar occurrence at Site 2. By 262 feet, both appeared to be unaffected by the dredge plume. The results from 1998 indicate that substantial recovery of the macroinvertebrate community occurs within one year after suction dredging. The effects of suction dredge mining on macroinvertebrates are local and short lived.

APPENDIX B
ESA Critical Habitat Areas



APPENDIX C – REFERENCES

NPDES Permit Writer's Manual. EPA, Office of Water, Office of Wastewater Management, Permits Division. Washington, DC. 20460; EPA-833-B-96-003, December 1996, 220pp.

Technical Support Document for Water Quality-based Toxics Control. EPA, Office of Water Enforcement and Permits, Office of Water Regulations and Standards. Washington, DC, 20460; EPA/505/2-90-001, March 1991, 145pp.

Impact of suction dredging on water quality, benthic habitat, and biota in the Fortymile River, Resurrection Creek, and Chatanika River, Alaska. Prepared for EPA by Aaron M. Prussian, Todd V. Royer, and G. Wayne Minshall, Idaho State University. June 1999.

Regional Baseline Geochemisty and Environmental Effects of Gold Placer Mining Operations on the Fortymile River, Eastern Alaska. Department of Interior, U.S. Geological Survey. Open-File Report 99-328. 1999.

Regional Geochemical Results from the Analyses of Rock, Water, Soil, Stream Sediment, and Vegetation Samples--Fortymile River Watershed, East-Central Alaska. Department of Interior, U.S. Geological Survey. Open-File Report 99-33. 1999.
Administrative Record for the 2000 Re-issuance of the NPDES GP for Alaskan Medium-size Suction Dredge Placer Miners (AKG-37-1000).

66 FR 8849 February 2, 2001. Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Alaska-Breeding Population of Steller's Eider; Final Rule.

66 FR 9145 February 6, 2001. Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Alaska-Breeding Population of the Spectacled Eider; Final Rule.

Alaska Marine Mammal Stock Assessments, 2003. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center. Technical Memorandum NMFS-AFSC-144

APPENDIX A

STANDARD CONDITIONS

APDES PERMIT

NONDOMESTIC DISCHARGES

June 2010

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Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements. Appendix A, Standard Conditions is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-7508
Email: DEC.Water.WQPermit@alaska.gov

1.1.2 Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

1.2 Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation

and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3 Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5 Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6 Proper Operation and Maintenance

1.6.1 A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee's duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.

1.6.2 Operation and maintenance records shall be retained and made available at the site.

1.7 Permit Actions

a. A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8 Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9 Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10 Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

1.10.1 Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;

1.10.2 Have access to and copy any records that permit conditions require the permittee to keep;

1.10.3 Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and

1.10.4 Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11 Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

1.11.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

1.11.2 The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:

1.11.2.1 All calibration and maintenance records,

1.11.2.2 All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,

1.11.2.3 All reports required by a permit,

1.11.2.4 Records of all data used to complete the application for a permit,

1.11.2.5 Field logbooks or visual monitoring logbooks,

1.11.2.6 Quality assurance chain of custody forms,

1.11.2.7 Copies of discharge monitoring reports, and

1.11.2.8 A copy of this APDES permit.

1.11.3 Records of monitoring information must include:

1.11.3.1 The date, exact place, and time of any sampling or measurement;

1.11.3.2 The name(s) of any individual(s) who performed the sampling or measurement(s);

1.11.3.3 The date(s) and time any analysis was performed;

1.11.3.4 The name(s) of any individual(s) who performed any analysis;

1.11.3.5 Any analytical technique or method used; and

1.11.3.6 The results of the analysis.

1.11.4 Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under
40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12 Signature Requirement and Penalties

1.12.1 Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2), and (c)(3) and AS 46.03.790(g).

1.12.2 In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:

1.12.2.1 For a corporation, by a responsible corporate officer.

1.12.2.2 For a partnership or sole proprietorship, by the general partner or the proprietor, respectively.

1.12.2.3 For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official.

1.12.3 Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A,
Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1.12.3.1 The authorization is made in writing by a person described in Appendix A,
Part 1.12.2;

1.12.3.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and

1.12.3.3 The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.

1.12.4 If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.

1.12.5 Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.13 Proprietary or Confidential Information

1.13.1 A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words “confidential business information” on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference at 18 AAC 83.010, and is not otherwise required to be made public by state law.

1.13.2 A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.

1.13.3 A permittee's claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15 Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (http://www.dnr.state.ak.us/parks/oha/), is to be notified immediately at (907) 269-8721.

1.16 Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17 Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1 Planned Changes

2.1.1 The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:

2.1.1.1 The alteration or addition may make the facility a "new source" under one or more of the criteria in 18 AAC 83.990(44); or

2.1.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants

are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.

2.1.2 If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.

2.1.3 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2 Anticipated Noncompliance

2.2.1 A permittee shall give seven days' notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.

2.2.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3 Transfers

2.3.1 A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.

2.3.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4 Compliance Schedules

2.4.1 A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.

2.4.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5 Corrective Information

2.5.1 If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.

2.5.2 Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6 Bypass of Treatment Facilities

2.6.1 Prohibition of Bypass

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

2.6.1.1 The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2.6.1.2 There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

2.6.1.3 The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2 Notice of bypass

2.6.2.1 For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.

2.6.2.2 For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.

2.6.2.3 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.6.3 Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

2.6.3.1 Does not cause an effluent limitation to be exceeded, and

2.6.3.2 Is for essential maintenance to assure efficient operation.

2.7 Upset Conditions

2.7.1 In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.

2.7.2 To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

2.7.2.1 An upset occurred and the permittee can identify the cause or causes of the upset;

2.7.2.2 The permitted facility was at the time being properly operated;

2.7.2.3 The permittee submitted 24-hour notice of the upset, as required in
18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and

2.7.2.4 The permittee complied with any mitigation measures required under
18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.

2.7.3 Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8 Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

2.8.1 In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the Department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:

2.8.1.1 The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.1.1 One hundred micrograms per liter (100 µg/L);

2.8.1.1.2 Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;

2.8.1.1.3 Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.1.4 The level established by the Department in accordance with 18 AAC 83.445.

2.8.1.2 Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.2.1 Five hundred micrograms per liter (500 µg/L);

2.8.1.2.2 One milligram per liter (1 mg/L) for antimony;

2.8.1.2.3 Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.2.4 The level established by the Department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1 Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2 Reporting of Monitoring Results

At intervals specified in the permit, monitoring results must be reported on the EPA discharge monitoring report (DMR) form, as revised as of March 1999, adopted by reference.

3.2.1 Monitoring results shall be summarized each month on the DMR or an approved equivalent report. The permittee must submit reports monthly postmarked by the 15th day of the following month.

3.2.2 The permittee must sign and certify all DMRs and all other reports in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. All signed and certified legible original DMRs and all other documents and reports must be submitted to the Department at the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

3.2.3 If, during the period when this permit is effective, the Department makes available electronic reporting, the permittee may, as an alternative to the requirements of Appendix A, Part 3.2.2, submit monthly DMRs electronically by the 15th day of the following month in accordance with guidance provided by the Department. The permittee must certify all DMRs and other reports, in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. The permittee must retain the legible originals of these documents and make them available to the Department upon request.

3.3 Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference at 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR required by Appendix A, Part 3.2**Error! Reference source not found.**. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4 Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

3.4.1 A report must be made:

3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and

3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances.

3.4.2 A report must include the following information:

3.4.2.1 A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;

3.4.2.2 The period of noncompliance, including exact dates and times;

3.4.2.3 If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and

3.4.2.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3.4.3 An event that must be reported within 24 hours includes:

3.4.3.1 An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).

3.4.3.2 An upset that exceeds any effluent limitation in the permit (see Appendix A,
Part 2.7, Upset Conditions).

3.4.3.3 A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.

3.4.4 The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.

3.4.5 The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:

3.4.5.1 The Noncompliance Notification Form or equivalent form is used to report the noncompliance;

3.4.5.2 The written report includes all the information required under Appendix A,
Part 3.4.2;

3.4.5.3 The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5.;

3.4.5.4 The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and

3.4.5.5 The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.

3.4.6 The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov

3.5 Other Noncompliance Reporting

A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.2**Error! Reference source not found.** (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1 Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the State for a sum to be assessed by the court of not less than $500 nor more than $100,000 for the initial violation, nor more than $10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

4.1.1 Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

4.1.2 Reasonable costs incurred by the State in detection, investigation, and attempted correction of the violation;

4.1.3 The economic savings realized by the person in not complying with the requirements for which a violation is charged; and

4.1.4 The need for an enhanced civil penalty to deter future noncompliance.

4.2 Injunctive Relief

4.2.1 Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.

4.2.2 Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3 Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

4.3.1 Violates a regulation adopted by the Department under AS 46.03.020(12);

4.3.2 Violates a permit issued under the program authorized by AS 46.03.020(12);

4.3.3 Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);

4.3.4 Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or

4.3.5 Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4 Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than $10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) $200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3)).